

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
JPAB,EPAB,DWPI	'alpha4beta7' same (antibod\$ or hybridoma\$)	2	<u>L3</u>
JPAB,EPAB,DWPI	'act-1' same (antibod\$ or hybridoma\$)	2	<u>L2</u>
USPT	'act-1' same (antibod\$ or hybridoma\$)	1	<u>L1</u>

WEST[Help](#)[Logout](#)[Interrupt](#)[Main Menu](#)[Search Form](#)[Posting Counts](#)[Show S Numbers](#)[Edit S Numbers](#)[Preferences](#)**Search Results -**

Term	Documents
ACT-1.DWPI,EPAB,JPAB.	4
ACT-1S	0
ANTIBOD\$	0
ANTIBOD.DWPI,EPAB,JPAB.	49
ANTIBODANTIBODA.DWPI,EPAB,JPAB.	1
ANTIBODES.DWPI,EPAB,JPAB.	11
ANTIBODI.DWPI,EPAB,JPAB.	10
ANTIBODIC.DWPI,EPAB,JPAB.	1
ANTIBODIDES.DWPI,EPAB,JPAB.	1
ANTIBODIE.DWPI,EPAB,JPAB.	7
('ACT-1' SAME (ANTIBOD\$ OR HYBRIDOMA\$)).JPAB,EPAB,DWPI.	2

There are more results than shown above. [Click here to view the entire set.](#)

Database:	US Patents Full-Text Database	▲
	US Pre-Grant Publication Full-Text Database	
	JPO Abstracts Database	
	EPO Abstracts Database	
	Derwent World Patents Index	
	IBM Technical Disclosure Bulletins	▼

Refine Search:	'act-1' same (antibod\$ or hybridoma\$)	▲
		▼
		Clear

Search History**Today's Date: 4/15/2001**

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
JPAB,EPAB,DWPI	'act-1' same (antibod\$ or hybridoma\$)	2	<u>L2</u>
USPT	'act-1' same (antibod\$ or hybridoma\$)	1	<u>L1</u>

WEST[Help](#)[Logout](#)[Interrupt](#)[Main Menu](#)[Search Form](#)[Posting Counts](#)[Show S Numbers](#)[Edit S Numbers](#)[Preferences](#)**Search Results -**

Term	Documents
ALPHA4BETA7.DWPI,EPAB,JPAB.	2
ALPHA4BETA7S	0
ANTIBOD\$	0
ANTIBOD.DWPI,EPAB,JPAB.	49
ANTIBODANTIBODA.DWPI,EPAB,JPAB.	1
ANTIBODES.DWPI,EPAB,JPAB.	11
ANTIBODI.DWPI,EPAB,JPAB.	10
ANTIBODIC.DWPI,EPAB,JPAB.	1
ANTIBODIDES.DWPI,EPAB,JPAB.	1
ANTIBODIE.DWPI,EPAB,JPAB.	7
('ALPHA4BETA7' SAME (ANTIBOD\$ OR HYBRIDOMA\$)) .JPAB,EPAB,DWPI.	2

There are more results than shown above. [Click here to view the entire set.](#)

Database:	US Patents Full-Text Database	▲
	US Pre-Grant Publication Full-Text Database	
	JPO Abstracts Database	
	EPO Abstracts Database	
	Derwent World Patents Index	
	IBM Technical Disclosure Bulletins	▼

Refine Search:

'alpha4beta7' same (antibod\$ or
hybridoma\$)

[Clear](#)**Search History****Today's Date: 4/15/2001**

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw Desc	Image
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Generate Collection

Term	Documents
ACT-1.DWPI,EPAB,JPAB.	4
ACT-1S	0
ANTIBOD\$	0
ANTIBOD.DWPI,EPAB,JPAB.	49
ANTIBODANTIBODA.DWPI,EPAB,JPAB.	1
ANTIBODES.DWPI,EPAB,JPAB.	11
ANTIBODI.DWPI,EPAB,JPAB.	10
ANTIBODIC.DWPI,EPAB,JPAB.	1
ANTIBODIDES.DWPI,EPAB,JPAB.	1
ANTIBODIE.DWPI,EPAB,JPAB.	7
('ACT-1' SAME (ANTIBOD\$ OR HYBRIDOMA\$))JPAB,EPAB,DWPI.	2

There are more results than shown above. [Click here to view the entire set.](#)

Display

10

Documents, starting with Document:

2

Display Format:

CIT

Change Format

WEST**End of Result Set**

Generate Collection

L1: Entry 1 of 1

File: USPT

Jul 13, 1999

DOCUMENT-IDENTIFIER: US 5922676 A

TITLE: Methods of inhibiting cancer by using superfibronectin

DEPR:

To provide a basis for the in vitro studies of FIG. 7, the integrin surface expression profile on the tumor cell lines was determined by flow cytometric analysis as described in Pasqualini, R., et al., J. Cell. Biol. 125:447-460 (1994). Monoclonal antibodies against the human .alpha..sub.2 (AK-7), and .alpha..sub.4 (9F10) subunits were from Pharmingen (La Jolla, Calif.), anti-.beta..sub.3 (CD-61) was from Becton and Dickinson (San Jose, Calif.), anti-.beta..sub.4 (3E1) was from Gibco BRL (Bethesda, Md.), anti-.alpha..sub.5 from Oncogene Science (Cambridge, Mass.), anti-.alpha..sub.V from Chemicon (Temecula, Calif.), anti-.beta..sub.1 (TS2/16), anti-.beta..sub.5 (IA9), anti-.alpha..sub.1 (TS2/7), anti-.alpha..sub.6 (BQ16), and anti-.alpha..sub.3 (IVA5) were a gift from Dr. Martin Hemler (Dana Farber Cancer Institute, Harvard Medical School); the anti-.beta..sub.8 (SN-1) was from Dr. Robert Pytela (University of California, San Francisco), anti-.beta..sub.6 (9G6) and anti .alpha..sub.9 (Y9A2) were from Dr. Dean Sheppard (University of California, San Francisco), and the anti-.alpha..sub.4 .beta..sub.7 (Act-1) antibody was from Dr. Andrew Lazarovits (University of Western Ontario, Canada).

WEST

Generate Collection

Search Results - Record(s) 1 through 2 of 2 returned.☐ 1. Document ID: WO 9806248 A2

L2: Entry 1 of 2

File: EPAB

Feb 19, 1998

PUB-NO: WO009806248A2

DOCUMENT-IDENTIFIER: WO 9806248 A2

TITLE: TITLE DATA NOT AVAILABLE

PUBN-DATE: February 19, 1998

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 2. Document ID: AU 730326 B, WO 9806248 A2, AU 9739728 A, EP 918797 A2, CN 1227607 A, BR 9711079 A, MX 9901462 A1, NZ 334226 A

L2: Entry 2 of 2

File: DWPI

Mar 1, 2001

DERWENT-ACC-NO: 1998-159172

DERWENT-WEEK: 200117

COPYRIGHT 2001 DERWENT INFORMATION LTD

TITLE: Humanised immunoglobulin reactive with alpha-4-beta-7 integrin - used for treating inflammatory disease, pancreatitis, diabetes, asthma, graft versus host disease and sarcoidosis

INVENTOR: BENDIG, M M; JONES, S T ; NEWMAN, W ; PONATH, P D ; RINGLER, D J ; SALDANHA, J ; TARRAN JONES, S

PRIORITY-DATA: 1996US-0700737 (August 15, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
AU 730326 B	March 1, 2001	N/A	000	A61K039/00
WO 9806248 A2	February 19, 1998	E	145	C12N000/00
AU 9739728 A	March 6, 1998	N/A	000	A61K039/00
EP 918797 A2	June 2, 1999	E	000	C07K016/28
CN 1227607 A	September 1, 1999	N/A	000	C12N015/62
BR 9711079 A	June 6, 2000	N/A	000	C07K016/46
MX 9901462 A1	May 1, 1999	N/A	000	A61K045/00
NZ 334226 A	October 27, 2000	N/A	000	C12N005/10

INT-CL (IPC): A61K 39/00; A61K 39/395; A61K 45/00; C07K 14/705; C07K 14/78; C07K 16/28; C07K 16/46; C12N 0/00; C12N 5/10 ; C12N 5/18; C12N 5/22; C12N 15/13; C12N 15/62; C12N 15/85; G01N 33/577

WEST

Your wildcard search against 2000 terms has yielded the results below

Search for additional matches among the next 2000 terms

Generate Collection

Search Results - Record(s) 1 through 1 of 1 returned.

☐ 1. Document ID: US 5922676 A

L1: Entry 1 of 1

File: USPT

Jul 13, 1999

US-PAT-NO: 5922676

DOCUMENT-IDENTIFIER: US 5922676 A

TITLE: Methods of inhibiting cancer by using superfibronectin

DATE-ISSUED: July 13, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pasqualini; Renata	Solana Beach	CA	N/A	N/A
Ruoslahti; Erkki	Rancho Santa Fe	CA	N/A	N/A

US-CL-CURRENT: 514/12; 424/499, 435/402, 514/2, 530/324

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

Generate Collection

Term	Documents
ACT-1.USPT.	15
ACT-1S	0
ANTIBOD\$	0
ANTIBOD.USPT.	223
ANTIBODAY.USPT.	1
ANTIBODEES.USPT.	1
ANTIBODEIS.USPT.	1
ANTIBODES.USPT.	44
ANTIBODEY.USPT.	1
ANTIBODFIES.USPT.	1
('ACT-1' SAME (ANTIBOD\$ OR HYBRIDOMAS\$).USPT.	1

There are more results than shown above. [Click here to view the entire set.](#)

Documents, starting with Document:

Display Format:

>>>'IALOG' not recognized as set or accession number
? set hi ;set hi

15apr01 11:37:04 User208760 Session D1827.1
\$0.41 0.116 DialUnits File1
\$0.41 Estimated cost File1
\$0.05 TYMNET
\$0.46 Estimated cost this search
\$0.46 Estimated total session cost 0.116 DialUnits

File 410:Chronolog(R) 1981-2001 Mar/Apr
(c) 2001 The Dialog Corporation

Set	Items	Description
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?
HILIGHT set on as ''
HILIGHT set on as ''
? begin 5,73,155,399

15apr01 11:37:14 User208760 Session D1827.2
\$0.00 0.056 DialUnits File410
\$0.00 Estimated cost File410
\$0.01 TYMNET
\$0.01 Estimated cost this search
\$0.47 Estimated total session cost 0.172 DialUnits

SYSTEM:OS - DIALOG OneSearch

File 5:Biosis Previews(R) 1969-2001/Apr W2
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File 73:EMBASE 1974-2001/Apr W2
(c) 2001 Elsevier Science B.V.

*File 73: For information about Explode feature please
see Help News73.

File 155:MEDLINE(R) 1966-2001/Apr W3
(c) format only 2000 Dialog Corporation

*File 155: Medline has now updated. For further information
see Help News155.

File 399:CA SEARCH(R) 1967-2001/UD=13416
(c) 2001 AMERICAN CHEMICAL SOCIETY

*File 399: Use is subject to the terms of your user/customer agreement.
RANK charge added; see HELP RATES 399.

Set	Items	Description
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? s act(w)1

198801	ACT	
7661201	1	
S1	197	ACT(W)1

? s act(w)1 (20n) (antibod\$ or hybridoma?)

198801	ACT	
7661201	1	
	0	ANTIBOD\$
44215		HYBRIDOMA?
S2	0	ACT(W)1 (20N) (ANTIBOD\$ OR HYBRIDOMA?)

? s act(w)1 and (antibod\$ or hybridoma? or adhesion or integrin?)

198801 ACT
 7661201 1
 197 ACT(W)1
 0 ANTIBOD\$
 44215 HYBRIDOMA?
 290335 ADHESION
 56376 INTEGRIN?
 S3 20 ACT(W)1 AND (ANTIBOD\$ OR HYBRIDOMA? OR ADHESION OR
 INTEGRIN?)

? rd s3

...completed examining records

 S4 15 RD S3 (unique items)

? t s4/3/all

4/3/1 (Item 1 from file: 5)
 DIALOG(R)File 5:Biosis Previews(R)
 (c) 2001 BIOSIS. All rts. reserv.

10626286 BIOSIS NO.: 199699247431
 Distribution of beta-7 **integrins** in human intestinal mucosa and
 organized gut-associated lymphoid tissue.
 AUTHOR: Farstad I N(a); Halstensen T H; Lien B; Kilshaw P J; Lazarovitz A I
 ; Brandtzaeg P
 AUTHOR ADDRESS: (a)Inst. Pathol., The Natl. Hosp., Rikshospitalet, N-0027
 Oslo**Norway
 JOURNAL: Immunology 89 (2):p227-237 1996
 ISSN: 0019-2805
 DOCUMENT TYPE: Article
 RECORD TYPE: Abstract
 LANGUAGE: English

4/3/2 (Item 2 from file: 5)
 DIALOG(R)File 5:Biosis Previews(R)
 (c) 2001 BIOSIS. All rts. reserv.

10579258 BIOSIS NO.: 199699200403
Integrin alpha-4-beta-7 mediates human eosinophil interaction with
 MAdCAM-1, VCAM-1 and fibronectin.
 AUTHOR: Walsh G M(a); Symon F A; Lazarovits A I; Wardlaw A J
 AUTHOR ADDRESS: (a)Dep. Respiratory Med., Univ. Leicester Med. Sch.,
 Glenfield Hospital, Leicester LE3 9QP**UK
 JOURNAL: Immunology 89 (1):p112-119 1996
 ISSN: 0019-2805
 DOCUMENT TYPE: Article
 RECORD TYPE: Abstract
 LANGUAGE: English

4/3/3 (Item 3 from file: 5)
 DIALOG(R)File 5:Biosis Previews(R)
 (c) 2001 BIOSIS. All rts. reserv.

10579256 BIOSIS NO.: 199699200401
 Expression and function of alpha-4/beta-7 **integrin** on human natural
 killer cells.
 AUTHOR: Perez-Villar J J(a); Zapata J M; Melero I; Postigo A;
 Sanchez-Madrid F; Lopez-Botet M
 AUTHOR ADDRESS: (a)Serv. Immunologia, Hospital de la Princesa, Diego de
 Leon 62, 28006 Madrid**Spain
 JOURNAL: Immunology 89 (1):p96-104 1996
 ISSN: 0019-2805
 DOCUMENT TYPE: Article

RECORD TYPE: Abstract
LANGUAGE: English

4/3/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2001 BIOSIS. All rts. reserv.

10482477 BIOSIS NO.: 199699103622
Specific inhibition of T lymphocyte coactivation by triggering
integrin beta-1 reveals convergence of beta-1, beta-2, and beta-7
signaling pathways.
AUTHOR: Woodside Darren G; Teague T Kent; McIntyre Bradley W(a)
AUTHOR ADDRESS: (a)Univ. Texas, M.D. Anderson Cancer Cent., Dep.
Immunology, Box 180, 1515 Holcombe Boulevard, Hous**USA
JOURNAL: Journal of Immunology 157 (2):p700-706 1996
ISSN: 0022-1767
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

4/3/5 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2001 BIOSIS. All rts. reserv.

09066617 BIOSIS NO.: 199497074987
Differential expression in rheumatoid synovium and synovial fluid of
alpha-4-beta-7 **integrin**. A novel receptor for Fibronectin and
vascular cell **adhesion** molecule-1.
AUTHOR: Lazarovits Andrew I(a); Karsh Jacob
AUTHOR ADDRESS: (a)Univ. Hosp., Room 4TU46, Box 5339, 339 Windermere Rd.,
London, ON N6A 5A5**Canada
JOURNAL: Journal of Immunology 151 (11):p6482-6489 1993
ISSN: 0022-1767
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

4/3/6 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2001 BIOSIS. All rts. reserv.

08920904 BIOSIS NO.: 199396072405
CD53, a protein with four membrane-spanning domains, mediates signal
transduction in human monocytes and B cells.
AUTHOR: Olweus Johanna(a); Lund-Johansen Fridtjof; Horejsi Vaclav
AUTHOR ADDRESS: (a)Res. Dep., Becton Dickinson Immunocytometry Systems,
2350 Qume Drive, San Jose, CA 95131-1807**USA
JOURNAL: Journal of Immunology 151 (2):p707-716 1993
ISSN: 0022-1767
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

4/3/7 (Item 7 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2001 BIOSIS. All rts. reserv.

08920903 BIOSIS NO.: 199396072404
Selective expression of **integrin** alpha-4-beta-7 on a subset of human
CD4 positive memory T cells with hallmarks of gut-trophism.
AUTHOR: Schweighoffer Tamas(a); Tanaka Yoshiya; Tidswell Mark; Erle David J
; Horgan Kevin J; Luce Gale E Ginther; Lazarovits Andrew I; Buck David;

Shaw Stephen
AUTHOR ADDRESS: (a)Exp. Immunol. Branch, NCI, NIH, Build. 10, Room 4B17,
Bethesda, MD 20892**USA
JOURNAL: Journal of Immunology 151 (2):p717-729 1993
ISSN: 0022-1767
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

4/3/8 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

06647794 EMBASE No: 1996312652
Distribution of betainf 7 **integrins** in human intestinal mucosa and
organized gut-associated lymphoid tissue
Farstad I.N.; Halstensen T.S.; Lien B.; Kilshaw P.J.; Lazarovitz A.I.;
Brandtzaeg P.
Institute of Pathology, National Hospital, Rikshospitalet, N-0027 Oslo
Norway
Immunology (IMMUNOLOGY) (United Kingdom) 1996, 89/2 (227-237)
CODEN: IMMUA ISSN: 0019-2805
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

4/3/9 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

06597695 EMBASE No: 1996262400
Integrin alphainf 4betainf 7 mediates human eosinophil interaction
with MACAM-1, VCAM-1 and fibronectin
Walsh G.M.; Symon F.A.; Lazarovits A.I.; Wardlaw A.J.
Department of Respiratory Medicine, University Leicester Medical School,
Glenfield Hospital, Leicester LE3 9QP United Kingdom
Immunology (IMMUNOLOGY) (United Kingdom) 1996, 89/1 (112-119)
CODEN: IMMUA ISSN: 0019-2805
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

4/3/10 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

06597693 EMBASE No: 1996262398
Expression and function of alphainf 4/betainf 7 **integrin** on human
natural killer cells
Perez-Villar J.J.; Zapata J.M.; Melero I.; Postigo A.; Sanchez-Madrid F.;
Lopez-Botet M.
Servicio de Inmunologia, Hospital de la Princesa, Diego de Leon 62,28006
Madrid Spain
Immunology (IMMUNOLOGY) (United Kingdom) 1996, 89/1 (96-104)
CODEN: IMMUA ISSN: 0019-2805
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

4/3/11 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

06549143 EMBASE No: 1996211077
Specific inhibition of T lymphocyte coactivation by triggering

integrin betainf 1 reveals convergence of betainf 1, betainf 2, and betainf 7 signaling pathways

Woodside D.G.; Teague T.K.; McIntyre B.W.

Department of Immunology, M. D. Anderson Cancer Center, University of Texas, 1515 Holcombe Boulevard, Houston, TX 77030 United States

Journal of Immunology (J. IMMUNOL.) (United States) 1996, 157/2 (700-706)

CODEN: JOIMA ISSN: 0022-1767

DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

4/3/12 (Item 5 from file: 73)

DIALOG(R)File 73:EMBASE

(c) 2001 Elsevier Science B.V. All rts. reserv.

05447652 EMBASE No: 1993215751

Selective expression of **integrin** alpha4beta7 on a subset of human CD4sup + memory T cells with hallmarks of gut-trophism

Schweighoffer T.; Tanaka Y.; Tidswell M.; Erle D.J.; Horgan K.J.; Luce G.E.G.; Lazarovits A.I.; Buck D.; Shaw S.

Experimental Immunology Branch, NCI, NIH, Bethesda, MD 20892 United States

Journal of Immunology (J. IMMUNOL.) (United States) 1993, 151/2 (717-729)

CODEN: JOIMA ISSN: 0022-1767

DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

4/3/13 (Item 1 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2000 Dialog Corporation. All rts. reserv.

09195954 97376878

Structure-function analysis of the **integrin** beta 7 subunit: identification of domains involved in **adhesion** to MAdCAM-1.

Tidswell M; Pachynski R; Wu SW; Qiu SQ; Dunham E; Cochran N; Briskin MJ; Kilshaw PJ; Lazarovits AI; Andrew DP; Butcher EC; Yednock TA; Erle DJ

Lung Biology Center, Department of Medicine, University of California, San Francisco 94143, USA. easd@itsa.ucsf.edu

Journal of immunology (UNITED STATES) Aug 1 1997, 159 (3) p1497-505, ISSN 0022-1767. Journal Code: IFB

Contract/Grant No.: K08HL03230, HL, NHLBI; R01HL52004, HL, NHLBI; AI37832, AI, NIAID

Languages: ENGLISH

Document type: JOURNAL ARTICLE

4/3/14 (Item 2 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2000 Dialog Corporation. All rts. reserv.

08147514 95261715

Integrin alpha 4 beta 7 co-stimulation of human peripheral blood T cell proliferation.

Teague TK; Lazarovits AI; McIntyre BW

Department of Immunology, University of Texas M. D. Anderson Cancer, Center, Houston 77030, USA.

Cell adhesion and communication (SWITZERLAND) Dec 1994, 2 (6) p539-47, ISSN 1061-5385 Journal Code: B4A

Contract/Grant No.: CA62596, CA, NCI

Languages: ENGLISH

Document type: JOURNAL ARTICLE

4/3/15 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2000 Dialog Corporation. All rts. reserv.

05324396 88236439

Human cytotrophoblastic antigens defined by monoclonal antibodies.
Abe Y; Okamura K; Hamazaki Y; Wada Y; Yajima A
Department of Obstetrics and Gynecology, Tohoku University School of
Medicine, Sendai.
Tohoku journal of experimental medicine (JAPAN) Mar 1988, 154 (3)
p245-51, ISSN 0040-8727 Journal Code: VTF
Languages: ENGLISH
Document type: JOURNAL ARTICLE

t s4/7/4,5,6,7,10,14,15

4/7/4 (Item 4 from file: 5)
DIALOG(R)File 5: Biosis Previews(R)
(c) 2001 BIOSIS. All rts. reserv.

10482477 BIOSIS NO.: 199699103622
Specific inhibition of T lymphocyte coactivation by triggering
integrin beta-1 reveals convergence of beta-1, beta-2, and beta-7
signaling pathways.
AUTHOR: Woodside Darren G; Teague T Kent; McIntyre Bradley W(a)
AUTHOR ADDRESS: (a)Univ. Texas, M.D. Anderson Cancer Cent., Dep.
Immunology, Box 180, 1515 Holcombe Boulevard, Hous**USA
JOURNAL: Journal of Immunology 157 (2):p700-706 1996
ISSN: 0022-1767
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: T cell coactivation is a dynamic process subject to
integrin-dependent positive and negative regulation. Costimulation
of human peripheral blood T cells by CD3 mAb OKT3 in conjunction with
anti-alpha-4 has been shown to be down-regulated by the anti-beta-1.1
epitope-specific mAb 18D3. As expected, maximal costimulation induced by
alpha-4-specific mAb L25 was inhibited (70%) by the addition of soluble
mAb 18D3. Surprisingly, soluble mAb 18D3 inhibited maximal proliferation
induced by the costimulatory alpha-4-beta-7-specific mAb **ACT-**
1 by 40%, thus demonstrating that one **integrin** subfamily can
regulate the activity of another. To determine whether mAb 18D3 could
regulate more than alpha-4-associated **integrin**-mediated
costimulation, non-alpha-4 **integrins** were tested. mAb 18D3
inhibited maximal proliferation induced by alpha-L-specific mAb 3D6, and
an alpha-5-specific mAb 16. This clearly demonstrates that a variety of
integrin costimulatory molecules (of the beta-1, beta-2, and beta-7
subfamilies) can be regulated negatively by mAb 18D3. To analyze the
specificity of this negative regulation, other cell surface costimulatory
molecules were tested for susceptibility to mAb 18D3. Although Abs
specific for CD4, CD26, CD28, CD44, CD45RA, or CD45RO were sufficient to
activate T cells when co-immobilized with anti-CD3 mAb, all were
refractory to the inhibitory effects of mAb 18D3. Inhibition of T cell
activation directly correlated with diminished IL-2 production. This
suggests that mAb 18D3 selectively regulates **integrin**-dependent T
cell activation by delivering a negative effect at some common point
utilized by various **integrin** subfamilies.

4/7/5 (Item 5 from file: 5)
DIALOG(R)File 5: Biosis Previews(R)
(c) 2001 BIOSIS. All rts. reserv.

09066617 BIOSIS NO.: 199497074987
Differential expression in rheumatoid synovium and synovial fluid of
alpha-4-beta-7 **integrin**. A novel receptor for Fibronectin and
vascular cell **adhesion** molecule-1.
AUTHOR: Lazarovits Andrew I(a); Karsh Jacob
AUTHOR ADDRESS: (a)Univ. Hosp., Room 4TU46, Box 5339, 339 Windermere Rd.,
London, ON N6A 5A5**Canada
JOURNAL: Journal of Immunology 151 (11):p6482-6489 1993
ISSN: 0022-1767

DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: T lymphocyte **adhesion** to vascular endothelium plays an important role in the immunopathogenesis of rheumatoid arthritis. The migration of T lymphocytes into the synovium is mediated by a variety of **adhesion** molecules, notably the **integrins**. We have prepared **Act 1**, a murine mAb that identifies a novel **integrin** termed alpha-4-beta-7. The natural ligands for alpha-4-beta-7 are vascular cell **adhesion** molecule-1 and fibronectin; both molecules are upregulated in the rheumatoid synovium. We investigated the expression of alpha-4-beta-7 in the three compartments of rheumatoid arthritis, the peripheral blood, synovial fluid, and synovial membrane, utilizing the FACS and immunoperoxidase microscopy of frozen tissues. The results of our experiments show a striking differential expression of alpha-4-beta-7 **integrin** in rheumatoid arthritis. Sixty-two percent of synovial membrane T cells expressed high density alpha-4-beta-7, in contrast to only 4.7% of synovial fluid and 9.1% of PBL. These data suggest that the expression of alpha-4-beta-7 **integrin** may provide a mechanism whereby certain T cells adhere to rheumatoid synovium while others remain in the synovial fluid. The augmented expression of alpha-4-beta-7 in the synovial membrane T cells may contribute to the development and perpetuation of rheumatoid arthritis.

4/7/6 (Item 6 from file: 5)
DIALOG(R)File 5: Biosis Previews(R)
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08920904 BIOSIS NO.: 199396072405
CD53, a protein with four membrane-spanning domains, mediates signal transduction in human monocytes and B cells.
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JOURNAL: Journal of Immunology 151 (2):p707-716 1993
ISSN: 0022-1767
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: CD53 is a member of a novel family of molecules with four presumably membrane-spanning domains. The structure and functional characteristics of these molecules indicate that they may play an important role in transmembrane communication. We therefore investigated whether CD53 is involved in activation of human leukocytes. Cross-linking of cell-bound F(ab')-2 fragments of two different anti-CD53 mAb with F(ab')-2 anti-mouse Ig led to cytoplasmic calcium fluxes in B cells, monocytes, and granulocytes and activation of the monocyte oxidative burst. These responses were specific for CD53, as cross-linking of CD11a, CD18, CD35, CD43, CD44, CD45, or CDw50 did not induce leukocyte activation. Low concentrations of staurosporine (10 to 20 nM) completely inhibited PMA-mediated activation, but had no effect on CD53-mediated calcium fluxes and inhibited only partially CD53-mediated oxidative burst. This suggests that CD53-mediated signaling is largely independent of protein kinase C. CD53-mediated calcium fluxes were inhibited by high concentrations of staurosporine (300 to 500 nM) but not by ADP-ribosylating toxins, suggesting dependence on tyrosine kinases rather than GTP-binding proteins. The results indicate that CD53, like several other leukocyte Ag with four membrane-spanning regions, has the ability to mediate cell activation, and support the view that these molecules are involved in transmembrane communication.

4/7/7 (Item 7 from file: 5)

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08920903 BIOSIS NO.: 199396072404

Selective expression of **integrin** alpha-4-beta-7 on a subset of human CD4 positive memory T cells with hallmarks of gut-trophism.

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JOURNAL: Journal of Immunology 151 (2):p717-729 1993

ISSN: 0022-1767

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: Human memory CD4+ T lymphocytes are heterogenous in expression of **integrins**; one subset has the unexpected phenotype beta-1-low-alpha-4-high. We demonstrate that this subset is unique among CD4+ cells in expression of high levels of alpha-4-beta-7, detected by a distinctive mAb **Act-1**. alpha-4-beta-7 is involved in binding to both fibronectin and vascular cell **adhesion** molecule-1; **Act-1** blocks cell binding to the former and augments binding to the latter. **Act-1** expression marks a subset of memory cells that, unlike the predominant circulating memory cell, has up-regulated beta-7 rather than beta-1. Their phenotype is distinct from that described for skin-homing T cells and is fully consistent with that described for gut-homing T cells. Differential **adhesion** capacity of this subset is verified by selective binding to FN and vascular cell **adhesion** molecule-1 in a beta-1-independent fashion. Thus, alpha-4-beta-7 detected on this subset of circulating normal T cells fits the expectations for a gut-homing receptor.

4/7/10 (Item 3 from file: 73)

DIALOG(R)File 73:EMBASE

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06597693 EMBASE No: 1996262398

Expression and function of alphainf 4/betainf 7 **integrin** on human natural killer cells

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Immunology (IMMUNOLOGY) (United Kingdom) 1996, 89/1 (96-104)

CODEN: IMMUA ISSN: 0019-2805

DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARYLANGUAGE: ENGLISH

In this report, we have analysed the expression and function of the alphainf 4/betainf 7 heterodimer in human natural killer (NK) cells. The expression of alphainf 4betainf 7 is induced in NK cells upon activation, as the anti-alphainf 4betainf 7 **ACT-1** monoclonal antibody (mAb) faintly stained a minority of peripheral blood NK cells, whereas it strongly reacted with in viti o long-term interleukin-2 (IL-2)-activated NK cells. Incubation with **ACT-1** or its F(ab')inf 2 fragments induced a strong homotypic **adhesion** of NK cells, comparable to that stimulated by the anti-alphainf 4 (HP1/7) mAb. Cell-cell interaction induced by the **ACT-1** mAb was only prevented by another anti-alphainf 4 mAb (HP2/1) that recognizes a different epitope. In alphainf 4betainf 7-mediated cell aggregation, the alphainf 4betainf 7 heterodimer was redistributed to intercellular contact sites, thus, suggesting a direct involvement of this interprin in the formation of cell clusters. In NK cells attached to Fibronectin (FN38) or vascular cell

adhesion molecule-1 (VCAM-1), both **alpha**4**beta**7 and **alpha**4**beta**1 **integrins** were redistributed at the ventral cellular membrane forming discrete contact sites. The **ACT-1** mAb only partially blocked NK cell binding to FN38, but in combination with the anti-**beta**1 mAb LIA1/2, NK cell binding to FN38 was completely inhibited. In contrast, **ACT-1** did not modify NK cell **adhesion** to VCAM-1, thus supporting the theory that the **alpha**4**beta**7 binding sites for both ligands appear to be different. Our results indicate that upon IL-2-activation, expression of functional **alpha**4**beta**7 **integrin** is induced on NK cells, potentially participating in their interaction with both extracellular matrix and endothelial cells.

4/7/14 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
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08147514 95261715

Integrin **alpha**4 **beta**7 co-stimulation of human peripheral blood T cell proliferation.

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Cell adhesion and communication (SWITZERLAND) Dec 1994, 2 (6) p539-47, ISSN 1061-5385 Journal Code: B4A

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Languages: ENGLISH

Document type: JOURNAL ARTICLE

The **integrin** **alpha**4 **beta**7 mediates lymphocytes **adhesion** to VCAM-1 on activated endothelium, fibronectin in the extracellular matrix, and the mucosal vascular addressin MAdCAM-1. It is unclear whether **alpha**4 **beta**7 performs any function beyond directing specific **adhesion** reactions. We addressed the possibility that triggering of **alpha**4 **beta**7 with a specific monoclonal antibody was capable of delivering an accessory stimulus that would coactivate T cells and lead to proliferation. At submitogenic levels of anti-CD3 stimulation, triggering of **alpha**4 **beta**7 by immobilized mAb **ACT-1** resulted in T cell blastogenesis, IL-2 production, expression of the IL-2 receptor **alpha** chain CD25, and ultimately DNA synthesis. These results indicate that the **integrin** **alpha**4 **beta**7 is involved in more than lymphocyte **adhesion** and homing but also plays a role in cell signaling.

4/7/15 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
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05324396 88236439

Human cytotrophoblastic antigens defined by monoclonal antibodies.

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Tohoku journal of experimental medicine (JAPAN) Mar 1988, 154 (3) p245-51, ISSN 0040-8727 Journal Code: VTF

Languages: ENGLISH

Document type: JOURNAL ARTICLE

Monoclonal antibodies have been raised against cytotrophoblast. Two different antigens, defined on cytotrophoblast but not on syncytiotrophoblast were designated **ACT-1** and **ACT-2**, respectively. Chorionic villi were taken from normal early pregnancy and processed for immunization by two different procedures. **ACT-1** was demonstrated to be present in lung alveolar cells, endothelial mucosa of the jejunum, colon, ureter, urinary bladder and the fallopian tube, and endometrial gland of the pregnant uterus. On the other hand, **ACT-2** was present in the endothelial mucosa of the stomach, endothelium of the renal

vessel, and the decidua of the pregnant uterus. Although the monoclonal antibodies did not react with such established cell lines as Bewo, SCH, OVK-18, HHUA, MK-01, FL, BHK and P3 X 63Ag 8 . 653, they did react with some of the cell lines when the cell membrane was destroyed with Triton X-100. Each antibody, therefore, may recognize the antigen not on the cell membrane but in the cytoplasm. The antigens might be shed or may disappear in the process of differentiation from cytotrophoblast to syncytiotrophoblast.